Bruhat Bangalore Mahanagara Palike
Excecutive Engineer Yelahanka Division

Name of Work: Improvements to roads and drains SFS, B sector opposite RTO shopping complex in ward No. 04

					Estimate Cost Rs.			150.00 Lakhs
Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
Removing & Refixing Stone Slabs of drains and Pointing in C.M(1:3). (Page No 25., I.No.5.33 of DPWD SOR 2016-17)								
Basic rate	76.00							
ESM-4D+HOC	8.36							
Sub Total-1	84.36							
6% Add	5.06							
Sub Total-2	89.42							
Thickness slab								
12th B main	2	248.00	1.00		496.00			
12th B cross	2	190.00	1.00		380.00			
12th B main	2	153.00	1.00		306.00			
12th B cross	2	165.00	1.00		330.00			
12th B main	2	70.00	1.00		140.00			
Cross road	2	73.00	1.00		146.00			
12th B main	2	250.00	1.00		500.00			
Indira canteen road	2	412.00	1.00		824.00			
12th B main	2	422.00	1.00		844.00			
12th B cross	2	144.00	1.00		288.00			
Thickness slab								
Cross road	2	248.00	1.65		818.40			
12th B main	2	190.00	1.65		627.00			
12th B cross	2	153.00	1.65		504.90			
Jothwell opticals	2	165.00	1.65		544.50			
12th B main	2	70.00	1.65		231.00			
12th B main	2	73.00	1.65		240.90			
12th B cross	2	250.00	1.65		825.00			
Indira canteen road	2	412.00	1.65		1359.60			
12th B main	2	422.00	1.65		1392.60			
12th B cross	2	144.00	1.65		475.20			
Total Qty					**11273.10**			
total Qty					**3381.93**			
					3381.93	**Sqm**	**89.42**	**302417.59**
Providing precast slab of 100 mm thick including cost of all materials, labour, curing,transportation,loading ,unloading,etc.,complete as per the direction of engineer in charge- Data rate								
Basic rate	2100.00							
10% of Total qty of Item no -1 of precast slab					229.80			
					229.80	**Sqm**	**2100.00**	**482580.00**

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
Providing granite slabs of selected quality roughly dressed and fixed in cement mortar (1:6) including fixing curing etc., complete. 7.5cm thick (Page No 25., I.No.5.31.1 of KPWD S.R 2016-17).								
Basic rate	628.00							
10% AD-HOC	69.08							
Sub Total-1	697.08							
6% AW	41.82							
Sub Total-2	738.90							
Consider 15% of Total qty of Item no - 3.					1690.97			
					1690.97	**Sqm**	**738.90**	**1249462.16**
300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 1.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3 (Page No142., I.No.19.1 of KPWD S.R 2016-17).								
Basic rate	82.00							
10% AD-HOC	9.02							
Sub Total-1	91.02							
6% AW	5.46							
Sub Total-2	96.48							
10km ld & lt, transport	100.00							
Sub Total-3	196.48							
7th B main	2	248.00	0.55	0.50	136.40			
7th B cross	2	190.00	0.55	0.50	104.50			
12th B main	2	153.00	0.55	0.50	84.15			
4th B cross	2	165.00	0.55	0.50	90.75			
8th B main	2	70.00	0.55	0.50	38.50			
cross road	2	73.00	0.55	0.50	40.15			
6th B main	2	250.00	0.50	0.50	125.00			
Indira canteen road	2	412.00	0.50	0.50	206.00			
12th B main	2	422.00	0.50	0.50	211.00			
12th B cross	2	144.00	0.50	0.50	72.00			
Cut portion								
7th B main	1	248.00	1.20	0.40	119.04			
7th B cross	1	190.00	1.20	0.40	91.20			
12th B main	1	153.00	1.20	0.40	73.44			
4th B cross	1	165.00	1.20	0.40	79.20			
8th B main	1	70.00	1.20	0.40	33.60			
cross road	1	73.00	1.20	0.40	35.04			
6th B main	1	250.00	1.20	0.40	120.00			
Indira canteen road	1	412.00	1.20	0.40	197.76			
12th B main	1	422.00	1.20	0.40	202.56			
12th B cross	1	144.00	1.20	0.40	69.12			
Side reaches	10	15.00	6.00	0.40	360.00			
culvert	2	8.00	1.50	1.00	24.00			

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
					2513.41	**Cum**	**196.48**	**493837.81**
4-1.2: Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.78cum and fine aggregates @ 0.465cum machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications.Specification No.KBS 4.1, 4.2 (P.12/I.4.2)/ PWD SR 2016-17								
Basic rate	5046.00							
10% HOC	555.06							
Sub Total-1	5601.06							
6% LW	336.06							
Sub Total-2	5937.12							
Culvert	2	8.00	1.50	0.15	3.60			
					3.60	**Cum**	**5937.12**	**21,373.64**
5.3-3 : Providing and constructing granite / trap / basalt size stone masonry in basement with cement mortar 1:6, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications. KBS 5.1.13 (P.23/I.5.9)/ PWD SR 2016-17								
Basic rate	5005.00							
10% HOC	550.55							
Sub Total-1	5555.55							
6% LW	333.33							
Sub Total-2	5888.88							
Culvert	4	8.00	0.45	0.70	10.08			
					10.08	**Cum**	**5888.88**	**59,359.94**
4-1.6: Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates at 0.78cum and fine aggregates at 0.459 cum, machine mixed, concrete laid in layers not exceeding 15 cms.thick, well compacted, in foundation, plinth and cills including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1,4.2. (P.No.12, Item 4.6 of PW, P&IWTD SR 2016-17)								
Basic rate	5441.00							
10% HOC	598.51							
Sub Total-1	6039.51							
6% LW	362.37							
Sub Total-2	6401.88							
Culvert	4	8.00	0.45	0.10	1.44			
					1.44	**Cum**	**6401.88**	**9,218.71**
Providing precast slab of 250 mm thick including cost of all materials, labour, curing,transportation,loading ,unloading,etc.,complete as per the direction of engineer in charge- (Data rate)								
Basic rate	5111.00							
	2	8.00	1.50		24.00			
					24.00	**Sqm**	**5111.00**	**122664.00**

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
M400-6.1. Construction of granular sub-base by providing close graded material, crushed stone aggregates of granite/trap/basalt material, mixing in a mechaical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications. A. Plant Mix Method.Close graded granular sub-base material as per 400-1 For Grading- II Material (Page No 155., I.No.20.4.2 of KPWD S.R 2016-17).								
Basic rate	1571.00							
10.00 AD-HOC	172.81							
Sub Total-1	1743.81							
6% AW	104.63							
Sub Total-2	1848.44							
Add Cut portion								
7th B main	1	248.00	1.20	0.15	44.64			
7th B cross	1	190.00	1.20	0.15	34.20			
12th B main	1	153.00	1.20	0.15	27.54			
4th B cross	1	165.00	1.20	0.15	29.70			
13th B main	1	70.00	1.20	0.15	12.60			
Cross road	1	73.00	1.20	0.15	13.14			
13th B main	1	250.00	1.20	0.15	45.00			
Behind canteen road	1	412.00	1.20	0.15	74.16			
12th B main	1	422.00	1.20	0.15	75.96			
12th B cross	1	144.00	1.20	0.15	25.92			
Wet reaches	10	15.00	6.00	0.15	135.00			
					517.86	**Cum**	**1848.44**	**957232.41**
M400- Wet Mix Macadam - KSRRB M400-17. Providing, laying, spreading and compacting crushed stones aggregate to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH specification No. 406 (P.No.158 I.No.20.18)								
Basic rate	1668.00							
10.00 AD-HOC	183.48							
Sub Total-1	1851.48							
6% AW	111.09							
Sub Total-2	1962.57							
Add Cut portion								
7th B main	1	248.00	1.20	0.225	66.96			
7th B cross	1	190.00	1.20	0.225	51.30			
12th B main	1	153.00	1.20	0.225	41.31			
4th B cross	1	165.00	1.20	0.225	44.55			
13th B main	1	70.00	1.20	0.225	18.90			
Cross road	1	73.00	1.20	0.225	19.71			
13th B main	1	250.00	1.20	0.225	67.50			
Behind canteen road	1	412.00	1.20	0.225	111.24			
12th B main	1	422.00	1.20	0.225	113.94			
12th B cross	1	144.00	1.20	0.225	38.88			
Wet reaches	10	15.00	6.00	0.225	202.50			

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
					776.79	Cum	1962.57	1524503.82
Providing and applying primer coat with ss bitumen emulsion on prepared surface of granular base such as WMM including clearing of road surface and spraying primer at the rate of 0.60 kg/sqm using mechanical means complete as per specifications. MORTH Specification No.502 (P.No.560/Cl.No.21.6)								
Basic rate	26.00							
SOR 4D-HOC	2.86							
Sub Total-1	28.86							
GST 6%	1.73							
Sub Total-2	30.59							
Less Cut portion								
12th B main	1	248.00	1.20		297.60			
12th B cross	1	190.00	1.20		228.00			
13th B main	1	153.00	1.20		183.60			
13th B cross	1	165.00	1.20		198.00			
14th B main	1	70.00	1.20		84.00			
Cross road	1	73.00	1.20		87.60			
15th B main	1	250.00	1.20		300.00			
Metro canteen road	1	412.00	1.20		494.40			
12th B main	1	422.00	1.20		506.40			
12th B cross	1	144.00	1.20		172.80			
Side niches	10	15.00	6.00		900.00			
Middle connection								
12th B main	1	248.00	2.40		595.20			
12th B cross	1	190.00	2.10		399.00			
13th B main	1	153.00	2.00		306.00			
13th B cross	1	165.00	3.00		495.00			
14th B main	1	70.00	2.70		189.00			
Cross road	1	73.00	2.50		182.50			
15th B main	1	250.00	2.00		500.00			
Metro canteen road	1	412.00	2.50		1030.00			
12th B main	1	422.00	2.20		928.40			
12th B cross	1	144.00	2.25		324.00			
					8401.50	Sqm	30.59	257015.33
MORTH M500- 15. Providing, laying dense graded bituminous macadam using 40/60 TPH capacity H.M.P with Mechanical paver Gr-II (50mm to 75mm), crushed aggregates of specified grading premixed with 4.5% VG 30 grade bituminous binder and , transporting the hot mix to work site , laying to the required level and grade, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications MORTH Specification No.507 (P.No.162&163 Cl.No.21.17.6)								
Basic rate	6717.00							
SOR 4D-HOC	738.87							
Sub Total-1	7455.87							
GST 6%	447.35							
Sub Total-2	7903.22							
Less Cut portion								
12th B main	1	248.00	1.20	0.05	14.88			

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
cross	1	190.00	1.20	0.05	11.40			
main	1	153.00	1.20	0.05	9.18			
cross	1	165.00	1.20	0.05	9.90			
main	1	70.00	1.20	0.05	4.20			
road	1	73.00	1.20	0.05	4.38			
main	1	250.00	1.20	0.05	15.00			
canteen road	1	412.00	1.20	0.05	24.72			
main	1	422.00	1.20	0.05	25.32			
cross	1	144.00	1.20	0.05	8.64			
reaches	10	15.00	6.00	0.05	45.00			
correction								
main	1	248.00	2.40	0.05	29.76			
cross	1	190.00	2.10	0.05	19.95			
main	1	153.00	2.00	0.05	15.30			
cross	1	165.00	3.00	0.05	24.75			
main	1	70.00	2.70	0.05	9.45			
road	1	73.00	2.50	0.05	9.13			
main	1	250.00	2.00	0.05	25.00			
canteen road	1	412.00	2.50	0.05	51.50			
main	1	422.00	2.20	0.05	46.42			
cross	1	144.00	2.25	0.05	16.20			
					420.08	Cum	7903.22	3319946.07
500-2. Cleaning the existing black topped surface with brooms, soft brushes and finally with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH specification clause 501. (P.No.161 & I.No.21.2)								
rate	3.00							
HOC	0.33							
Total-1	3.33							
	0.20							
Total-2	3.53							
main	1	248.00	6.50		1612.00			
cross	1	190.00	6.40		1216.00			
main	1	153.00	4.80		734.40			
cross	1	165.00	6.20		1023.00			
main	1	70.00	4.25		297.50			
road	1	73.00	4.30		313.90			
main	1	250.00	6.20		1550.00			
canteen road	1	412.00	7.70		3172.40			
main	1	422.00	5.00		2110.00			
cross	1	144.00	6.20		892.80			
					12922.00	Sqm	3.53	45,612.08
500-7:Providing and applying tack coat with bitumen emulsion using 80/100 grade bitumen (VG20) on the prepared black toped suface at 2.5kg per 10 sqm, heating bitumen in boiler fitted with spray set (Excluding cleaning of road surface) including cost of all materials, labour, HOM of Machineries complete as per Specifications.(P.No.160 & I.No.21.7)								
rate	11.00							

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
ADD-HOC	1.21							
Total-1	12.21							
	0.73							
Total-2	12.94							
main	1	248.00	6.20		1537.60			
cross	1	190.00	6.10		1159.00			
main	1	153.00	4.80		734.40			
cross	1	165.00	6.20		1023.00			
main	1	70.00	4.25		297.50			
road	1	73.00	4.30		313.90			
main	1	250.00	6.00		1500.00			
canteen road	1	412.00	7.50		3090.00			
main	1	422.00	5.00		2110.00			
cross	1	144.00	6.20		892.80			
					12658.20	**Sqm**	**12.94**	**163830.02**
MS00- 15. Providing, laying bituminous Concrete using 40/60 THP capacity H.M.P with mechanical paver Gr-II (30mm to 45mm), crushed aggregates of specified grading premixed with 5.4% VG 30 grade bituminous binder and , transporting the hot mix to work site , laying to the required level and grade,rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH Specification clause No.500.9 complete in all respects complete as per specifications MORTH Specification No.509 (P.No.164 Item No.CE 22.6)								
rate	7659.00							
ADD-HOC	842.49							
Total-1	8501.49							
	510.09							
Total-2	9011.58							
main	1	248.00	6.20	0.04	61.50			
cross	1	190.00	6.10	0.04	46.36			
main	1	153.00	4.80	0.04	29.38			
cross	1	165.00	6.20	0.04	40.92			
main	1	70.00	4.25	0.04	11.90			
road	1	73.00	4.30	0.04	12.56			
main	1	250.00	6.00	0.04	60.00			
canteen road	1	412.00	7.50	0.04	123.60			
main	1	422.00	5.00	0.04	84.40			
cross	1	144.00	6.20	0.04	35.71			
					506.33	**Cum**	**9011.58**	**4562814.97**
Providing and fixing pre cast solid **cement concrete kerb stones** made out of CC 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation etc.complete (P.No-25, I No-5.30)								
rate	313.00							
ADD-HOC	34.43							
Total-1	347.43							
	20.85							
Total-2	368.28							
main	2	75.00			150.00			

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
WALAW	22.58							
Sub Total-2	398.87							
		2177.00			4354.00			
@5.00m interval					725.67	Nos	398.87	289444.78
							Total Construction Cost	14774582.95
							DPR & PMC Charges	225400.00
							Sub Total	14999982.95
							Utility Shifting, Miscellaneous, Rounding off	17.05
							GRAND TOTAL	15000000.00

Certificate

1. The workspot was inspected and works is found to be necessary.
2. The area comes within the Bruhat Bangalore Mahanagara Palike limits.
3. The rates adopted based on the PWD SR,Bangalore circle for year 2016-2017, issue rates and Data Rates.

Assistant Engineer

Asst. Executive Engineer,

Executive Engineer,
Yelahanka Division,
BBMP Bangalore
7/2/18

Administrative Approval
Accorded For ...150.00 Lakhs...
Head of A/C...P-2415...
CER NO :...639/17-18 Dt:...08/02/2018...

E.E. (Project)

Technical Sanction
Accorded For ...150.00 Lakhs only...
Head of A/C...P-2415...
CER NO :...641... Dt:...08/02/18...

TA to CE (YNK)